#### State letter accompanies this supplement.

#### 1. Nebraska Background and Status

The State of Nebraska completed the build out of its P25 VHF statewide radio system infrastructure in December 2012. The state uses 700 MHz vehicle repeaters for hundreds of its state radio users to operate on the statewide radio system across the entire state coverage area. Vehicle repeater operation is integral to access the state's VHF mobile radio coverage over approximately 98% of the state territory using 700 MHz portable radios, in addition to supporting multi-jurisdictional law enforcement operations.

The state coordinated with the State of Iowa 700 MHz system buildout to allow state license 700 MHz channels to use omni antennas at the state border for expanded coverage and interoperability across the border. Nebraska upgraded its state subscribers to multiband P25 FDMA/TDMA, VHF/700/800 to make use of the investments in its spectrum resources.

The state coordinated with the populated urban areas to designate state license channels in support of their public safety mobile data infrastructure. These jurisdictions include the Omaha Metropolitan Area, Douglas County, Sarpy County and Washington County, NE and Pottawattamie County, IA. Eventually the mobile data infrastructure will be phased out. The state is in discussion with other counties to upgrade their analog infrastructures to 700/800 MHz P25 phase II simulcast. The state license 700 MHz spectrum is well utilized for multiple cooperative purposes.

#### 2. State License Use and Service Provided

#### a. Based on Population

Population use is comprised of several counties in the state's most populated areas. The Omaha Metropolitan Area, Douglas County, Sarpy County, and Washington County, Nebraska comprise a population of 772,000 (July 1, 2018 estimate), or 40% of the state population. As mentioned, eventually the mobile data infrastructure will be phased out. The state is in discussion with other counties to upgrade their analog infrastructures to 700/800 MHz P25 phase II simulcast.

#### b. Based on Territory

The state provides state license 700 MHz frequencies to hundreds of its state users operating vehicle repeaters to access the Nebraska statewide radio system over 98% of the state's 77,421 square miles. These vehicle repeaters are integral to the statewide radio system and its users. The state also uses state license 700 MHz frequencies in support of state special law enforcement operations. **Exhibit A** shows the frequency designations used in the State of Nebraska state license, call sign WPTZ786. **Exhibit B** shows the coverage provided in the statewide radio system.

#### 3. Channels Used in the State Licensee System

The state designated 87 of 96 channels for use as described, with the specific frequency designations shown in **Exhibit A**. The channel designations were coordinated between the state and local jurisdictions, including the State of Iowa, to accommodate state-to-state interoperability, fixed mobile data systems, subscriber radios and vehicle repeater operation statewide. State users operate their trunked radio talkgroups through vehicle repeaters to maintain communications with the VHF statewide radio system and with state and local dispatch centers statewide.

#### 4. Whether the State Licensee is making its showing based upon population or territory

The State of Nebraska showing is based primarily on territory, in addition to substantial portions of population areas and state border interoperability with Iowa.

#### 5. The percentage of territory or population that is served in Nebraska

The coverage map labeled **Exhibit B** shows the statewide coverage footprint, which covers approximately 98% of the state area. Urban population based mobile data systems and subscriber radios accounts for 40% of the state population, as listed in **Exhibit C**.

## 6. Nebraska System Footprint Based on the 40 dBuV/m F(50,50) Service Contour or an Alternate Signal Level Value

The Tri-County urban area mobile data system uses the 40 dBuV/m F(50,50) service contour as shown in **Exhibit D** and site locations are shown in **Exhibit E**. The State of Nebraska and State of Iowa agreed to not limit Iowa site contours and allow use of omni antennas at full power to enable coverage access to Iowa's system for border interoperability. The state operates multiband mobiles and portables to access any P25 FDMA/TDMA, VHF/700/800 systems within and adjacent to the state.

# 7. If any portion of a State Licensee's showing is based upon unconstructed facilities, information showing that the licensee has received funding approval for that portion of the system.

The Nebraska statewide radio system, Iowa statewide radio system and Tri-County mobile data system are fully constructed and operational.

### Exhibit A

## Channel Use Narrowband (12.5 KHz) 769-775 MHz and 799-805 MHz Bands

Narrowband 12.5 KHz 769-775 MHz and 799-805 MHz Bands								City of		State of
Base	Narrowband 12	2.5 KHz 769-77	75 MHz and 799 Mobile	9-805 MHz Band	ds	State of Nebraska	State of Nebraska	Lincoln Simulcast	State of Iowa	Missouri
Channel	Frequency	Allocation	Channel	Frequency	Allocation	State/Local	State/Local	Site 23	ISICS	MOSWIN
	- 4	State			State				Clarinda/Shenandoah	
25	769.15625	license	985	799.15625	license	Patrol DVRS 1			Simulcast	
27	769.16875	State	987	799.16875	State license	Patrol DVRS 5			Shelby	Monaillo
21	709.10075	license State	967	799.10075	State	Palloi DVRS 5			Shelby	Maryville
29	769.18125	license	989	799.18125	license	DMV DVRS			Monona	
		State			State					
31	769.19375	license	991	799.19375	license	Patrol DVRS 6			Atlantic	
33	769.20625	State license	993	799.20625	State license	Patrol DVRS 2			Council Bluffs Simulcast / Plymouth	
33	109.20023	State	993	799.20023	State	Falloi DVN3 2			Flymoun	
35	769.21875	license	995	799.21875	license	Patrol Dvrs 9				
		State			State				Clarinda/Shenandoah	
65	769.40625	license	1025	799.40625	license	Patrol DVRS 3			Simulcast	
67	769.41875	State license	1027	799.41875	State license	Patrol DVRS 10			Shelby	Maryville
01	709.41073	State	1027	799.41073	State	T ALIOI DVING TO			Sileiby	iviai y ville
69	769.43125	license	1029	799.43125	license	Patrol DVRS 7			Monona	
		State			State					
71	769.44375	license	1031	799.44375	license	Patrol DVRS 8			Atlantic	
73	769.45625	State license	1033	799.45625	State license	Patrol DVRS 4			Council Bluffs Simulcast / Plymouth	
73	703.43023	State	1000	733.43023	State	Patrol DVRS 11			riyinodar	
75	769.46875	license	1035	799.46875	license	CAP SEC				
		State			State				Clarinda/Shenandoah	
105	769.65625	license	1065	799.65625	license	SFM DVRS			Simulcast	
107	769.66875	State license	1067	799.66875	State license				Shelby	Maryville
107	100.00010	State	1007	133.00013	State	Washington County			Grielby	ivial y ville
109	769.68125	license	1069	799.68125	license	MO3	Patrol CAP SEC 12		Monona	
		State			State	Dodge County				
111	769.69375	license	1071	799.69375	license	Sheriff MO3			Atlantic	
113	769.70625	State license	1073	799.70625	State license	OCIO DVRS			Council Bluffs Simulcast / Plymouth	
110	700.70020	State	1070	100.10020	State	33.0 5 71.0			Tymouti	
115	769.71875	license	1075	799.71875	license					
		State			State	B : 155 / 6			Clarinda/Shenandoah	
145	769.90625	license State	1105	799.90625	license State	Patrol EP 13			Simulcast	
147	769.91875	license	1107	799.91875	license	AG VRX MO/MO3			Shelby	Maryville
1-17	700.01070	State	1101	700.01070	State	7.5 710(100/1000			Choloy	1. Tary vino
149	769.93125	license	1109	799.93125	license				Monona	

State of	Nebraska	700 MHz	License	WPTZ786

151	769.94375	State license		1111	799.94375	State license		Atlantic	
101	769.94375	State	-	1111	799.94375	State		Council Bluffs Simulcast /	
153	769.95625	license		1113	799.95625	license	NPPD MO3	Plymouth	
455	700 00075	State		4445	700 00075	State			
155	769.96875	license State	-	1115	799.96875	license State	Patrol Conventional	Clarinda/Shenandoah	
185	770.15625	license		1145	800.15625	license	Secure	Simulcast	
		State				State			
187	770.16875	license	-	1147	800.16875	license	5	Shelby	Maryville
189	770.18125	State license		1149	800,18125	State license	Patrol Conventional Secure	Monona	
103	770.10123	State	-	1143	000.10123	State	Jecuie	IVIOTIONA	
191	770.19375	license		1151	800.19375	license		Atlantic	
400	770 00005	State		4450	222 2225	State	Patrol Conventional	Council Bluffs Simulcast /	
193	770.20625	license State	-	1153	800.20625	license State	Secure	Plymouth	
195	770.21875	license		1155	800.21875	license			
		State			000121010	State		Clarinda/Shenandoah	
225	770.40625	license		1185	800.40625	license		Simulcast	
227	770.41875	State license		1187	800.41875	State license		Shelby	Maryville
221	770.41073	State	-	1107	800.41873	State	Washington County	Sileiby	iviaryville
229	770.43125	license		1189	800.43125	license	MO3	Monona	
		State				State			
231	770.44375	license State	-	1191	800.44375	license State		Atlantic  Council Bluffs Simulcast /	
233	770.45625	license		1193	800.45625	license		Plymouth	
	710110020	State			000.10020	State	State DVRS/Iowa	- J. House	
235	770.46875	license	l	1195	800.46875	license	Coordination		
265	770.65625	State license		1225	800.65625	State license	State DVRS/Iowa Coordination		
200	770.03023	State	-	1223	600.65625	State	State DVRS/Iowa		
267	770.66875	license		1227	800.66875	license	Coordination		
		State				State	State DVRS/Iowa		
269	770.68125	license	-	1229	800.68125	license	Coordination		
271	770.69375	State license		1231	800.69375	State license	State DVRS/lowa Coordination		
271	110.05515	State	-	1201	000.00070	State	State DVRS/Iowa		
273	770.70625	license		1233	800.70625	license	Coordination		
075	770 74075	State		4005	000 74075	State	State DVRS/Iowa		
275	770.71875	license State	-	1235	800.71875	license State	Coordination State DVRS/Iowa		
305	770.90625	license		1265	800.90625	license	Coordination		
		State				State	State DVRS/Iowa		
307	770.91875	license		1267	800.91875	license	Coordination		
309	770.93125	State license		1269	800.93125	State license	State DVRS/Iowa Coordination		
309	770.93123	State		1203	000.93123	State	State DVRS/Iowa		
311	770.94375	license		1271	800.94375	license	Coordination		
		State				State	State DVRS/Iowa		
313	770.95625	license	L	1273	800.95625	license	Coordination		

State of	f Nebra	ska 700	MH <sub>2</sub>	License	WPTZ786
Juliu Oi	INCDIA	ona / Ou	, ,,,,,,	LICCIISC	VVI 12/00

		State			State	State DVRS/Iowa			
315	770.96875	license	1275	800.96875	license	Coordination			
0.45	770 00405	State	4005	000 00405	State	Pottawattamie		Observators	
645	773.03125	license State	1605	803.03125	license State	County HPD Pottawattamie		Cherokee	
647	773.04375	license	1607	803.04375	license	County HPD		Harrison	
		State			State	_			
649	773.05625	license	1609	803.05625	license	Sarpy County HPD		Denison	
651	773.06875	State license	1611	803.06875	State license	Sarpy County HPD			
051	773.00073	State	1011	803.00873	State	Douglas County			
653	773.08125	license	1613	803.08125	license	HPD			
		State			State	Douglas County			
655	773.09375	license	1615	803.09375	license	HPD Pottawattamie		Dad Oals/Namb/Casth 0	
685	773.28125	State license	1645	803.28125	State license	County HPD		Red Oak/North/South & Cherokee	
000	770.20120	State	1043	000.20120	State	Pottawattamie		Oncrokec	
687	773.29375	license	1647	803.29375	license	County HPD		Harrison	
		State			State				
689	773.30625	license State	1649	803.30625	license	Sarpy County HPD		Denison	
691	773.31875	license	1651	803.31875	State license	Sarpy County HPD			
	170.01010	State	1001	000.01010	State	Douglas County			
693	773.33125	license	1653	803.33125	license	HPD			
	770 0 1075	State	4055	000 0 1075	State	Douglas County			
695	773.34375	license State	1655	803.34375	license State	HPD			
725	773.53125	license	1685	803.53125	license	Sarpy County HPD		Cherokee	
		State			State				
727	773.54375	license	1687	803.54375	license	Sarpy County HPD		Harrison	
729	772 55625	State	1689	902 FF62F	State			Danisan	
729	773.55625	license State	1009	803.55625	license State			Denison	
731	773.56875	license	1691	803.56875	license				
		State			State	Pottawattamie			
733	773.58125	license	1693	803.58125	license	County HPD			
735	773.59375	State license	1695	803.59375	State license	Pottawattamie County HPD			
733	110.00010	State	1093	303.33373	State	Pottawattamie		Red Oak/North/South &	
765	773.78125	license	1725	803.78125	license	County HPD		Cherokee	
	770	State		000 =00=	State	Pottawattamie	NDDD MOS		
767	773.79375	license	1727	803.79375	license	County HPD	NPPD MO3	Harrison	
769	773.80625	State license	1729	803.80625	State license			Denison	
, 55		State	1,20	000.00020	State				
771	773.81875	license	1731	803.81875	license				
770	772 00405	State	4700	002 02405	State	Douglas County			
773	773.83125	license State	1733	803.83125	license State	HPD Douglas County			
775	773.84375	license	1735	803.84375	license	HPD			
		State			State			Red Oak/North/South &	
805	774.03125	license	1765	804.03125	license		Buffalo County	Cherokee	

State of I	Nehraska	700	MH <sub>2</sub>	License	WPTZ786
Julie Oi i	veni aska	, 00	171114	LICCIISC	VVI 12/00

807	774.04375	State license	1767	804.04375	State license		Buffalo County		Harrison	
007	774.04373	State	1707	004.04373	State		Bullalo County		Tiamson	
809	774.05625	license	1769	804.05625	license		Buffalo County		Denison	
		State			State					
811	774.06875	license	1771	804.06875	license	Davida Carreta	Buffalo County			
813	774.08125	State license	1773	804.08125	State license	Douglas County HPD	Buffalo County			
010	774.00120	State	1770	004.00120	State	Douglas County	Bullalo Courty	Lincoln LSO		
815	774.09375	license	1775	804.09375	license	HPD	Buffalo County	DVRS		
		State			State				Red Oak/North/South &	
845	774.28125	license State	1805	804.28125	license State		Buffalo County		Cherokee	
847	774.29375	license	1807	804.29375	license		Buffalo County		Harrison	
011	77 1.20070	State	1007	001.20070	State		Bullato County		Tidificon	
849	774.30625	license	1809	804.30625	license		Buffalo County		Denison	
054	77404075	State	4044	00404075	State		D "   0 '			
851	774.31875	license State	1811	804.31875	license State	Douglas County	Buffalo County			
853	774.33125	license	1813	804.33125	license	HPD				
	11 1100 120	State	10.0	00 1100 120	State	Douglas County		Lincoln LPD		
855	774.34375	license	1815	804.34375	license	HPD		DVRS		
205	774 50405	State	4045	004 50405	State	Douglas County				
885	774.53125	license State	1845	804.53125	license State	HPD Douglas County				
887	774.54375	license	1847	804.54375	license	HPD				
		State			State					
889	774.55625	license	1849	804.55625	license					
004	774 50075	State	4054	004 50075	State					
891	774.56875	license State	1851	804.56875	license State	Douglas County				
893	774.58125	license	1853	804.58125	license	HPD				
		State			State	Douglas County		Lincoln LFR		
895	774.59375	license	1855	804.59375	license	HPD		DVRS 1		
925	774.78125	State license	1885	804.78125	State license	Douglas County HPD				
923	114.10125	State	1000	004.70125	State	Douglas County	Saunders County			
927	774.79375	license	1887	804.79375	license	HPD	Jail MO			
		State			State					
929	774.80625	license	1889	804.80625	license					
931	774.81875	State license	1891	804.81875	State license					
931	114.01013	State	1091	004.01075	State	Douglas County				
933	774.83125	license	1893	804.83125	license	HPD				
		State			State	Douglas County	OPPD Ft Calhoun	Lincoln LFR		
935	774.84375	license	1895	804.84375	license	HPD	MO	DVRS 2		

Exhibit B Nebraska Statewide Radio System Coverage

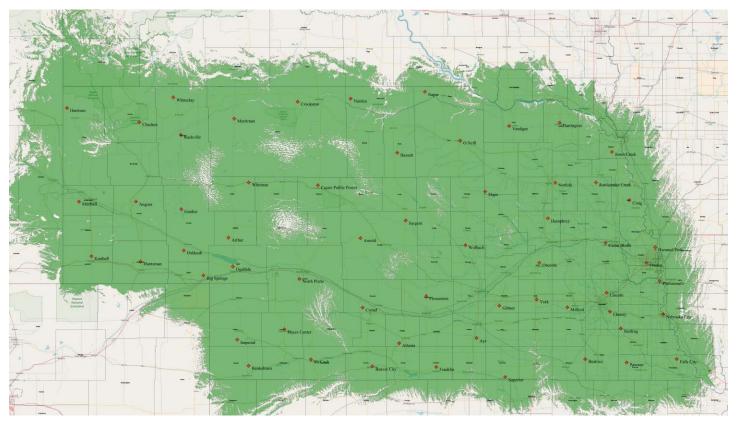


Exhibit C
Nebraska 700 MHz Use by Population\*

State Population	1,929,268
Douglas County Population	566,880
Sarpy County Population	184,459
Washington County Population	20,667
Tri-County Population Total	772,006
Tri-County Percent of State Population	40%

<sup>\*</sup> Estimate July 1, 2018

Exhibit D

Tri-County 700 MHz Mobile Data 40 dBuV/m F(50,50) Service Contours

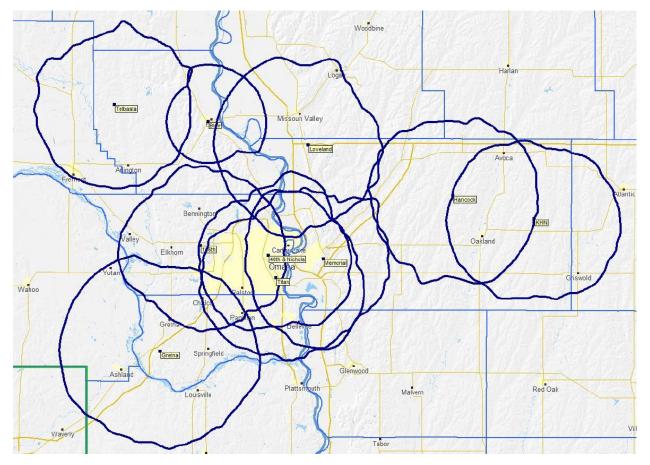


Exhibit E

Tri-County 700 MHz Mobile Data Sites

Tower	Latitude	Longitude	AMSL (m, ft)	AAT (m, ft)
156th	41 17 25 N	96 9 20 W	384, 1259.9	27, 88.6
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	51.8, 149.7	101-83B-09-0-03N-745.adf	91.4, 300	118.5, 388.6
40th & Nich	41 16 13 N	95 58 21 W	377, 1236.9	44.4, 145.7
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	52.3, 170.3	101-83B-09-0-03N-745.adf	56.4, 185	100.8, 330.7
Blair	41 32 25 N	96 8 7.1 W	331, 1086	-14.1, -46.3
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	51.8, 149.6	101-83B-09-0-03N-745.adf	30.5, 100	53.8, 176.5
Gretna	41 4 35 N	96 15 48.1 W	393, 1289.4	46.4, 152.4
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	50.9, 123.8	101-83B-09-0-03N-745.adf	115.8, 380	162.3, 532.4
Hancock	41 23 26.8 N	95 28 32.8 W	381, 1250.1	9.9, 32.3
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	52, 160.3	101-83B-09-0-03N-745.adf	106.7, 350	116.5, 382.4
KHIN	41 20 40.9 N	95 15 21 W	405, 1328.8	33.5, 109.9
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	52.5, 176.1	101-83B-09-0-03N-745.adf	91.4, 300	124.9, 409.9
Loveland	41 29 35.87 N	95 51 58.03 W	403, 1322.2	70.5, 231.3
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	52.8, 191.2	101-83B-09-0-03N-745.adf	53.3, 175	123.8, 406.3
Memorial	41 15 48.1 N	95 49 29 W	378, 1240.2	42.7, 140.2
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	52.2, 167.4	101-83B-09-0-03N-745.adf	59.4, 195	102.2, 335.3
Telbasta	41 34 28.9 N	96 23 14 W	406, 1332.1	23.3, 76.5
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	51.8, 149.6	101-83B-09-0-03N-745.adf	91.4, 300	114.8, 376.5
Titan	41 13 29 N	95 57 10.6 W	362, 1187.7	35.1, 115.2
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	52.2, 166.1	101-83B-09-0-03N-745.adf	78, 256	113.1, 371.2